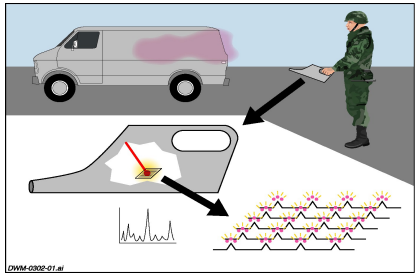
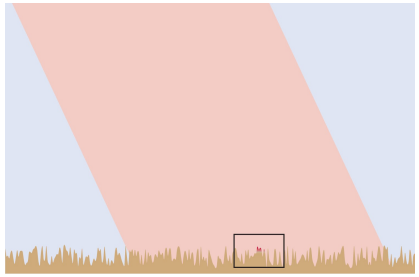
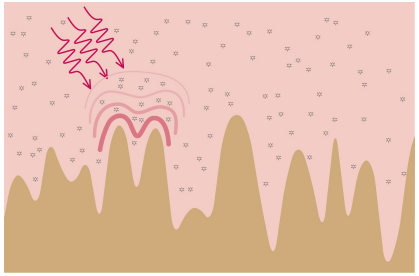
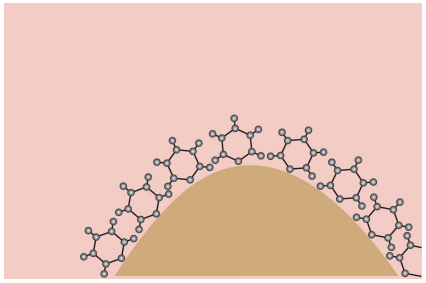
SERS for Chemical Marker Detection









Objective

To investigate the possibility of fabricating Surface Enhanced Raman Spectroscopy (SERS) detector surfaces to enhance detection of specific substances

Approach

- Nanofabrication of SERS sensor surfaces to optimize sensitivity to specific marker substances
- Modification/selection of specific marker substances to enhance interaction with SERS sensor surface

Payoff

The ability to detect small quantities of specific materials used for cooperative or non-cooperative marking purposes

Principal Investigator

Penn State